

**Notice of Allowability**

Application No.

10/790,769

Examiner

Huedung Cao Mancuso

Applicant(s)

YAMANAKA ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amenment, filed on 10/24/06.
2. ☒ The allowed claim(s) is/are 2-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TRINH DINH  
PRIMARY EXAMINER

**Examiner's Statement of Reasons for Allowance**

1. Claims 2-13 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art made of record fails to anticipate or make obvious the claimed invention. Specifically, the prior art fails to teach, in combination with the remaining elements as recited in claims 10, and 13:

The present invention is directed to a heat sink apparatus for an antenna coupling module.

Regarding claims 10, and 13, the Prior art fails to specifically teach that

the oxide superconductor for said superconductive high frequency circuit or said planar antenna is at least one type of oxide high-temperature superconductor selected from the group comprised of  $\text{Bi}_{n1}\text{Sr}_{n2}\text{Ca}_{n3}\text{Cu}_{n4}\text{O}_{n5}$  (where,  $1.8 \leq n1 \leq 2.2$ ,  $1.8 \leq n2 \leq 2.2$ ,  $0.9 \leq n3 \leq 1.2$ ,  $1.8 \leq n4 \leq 2.2$ , and  $7.8 \leq n5 \leq 8.4$ ),  $\text{Pb}_{k1}\text{Bi}_{k2}\text{Sr}_{k3}\text{Ca}_{k4}\text{Cu}_{k5}\text{O}_{k6}$  (where,  $1.8 \leq k1 + k2 \leq 2.2$ ,  $0 \leq k1 \leq 0.6$ ,  $1.8 \leq k3 \leq 2.2$ ,  $1.8 \leq k4 \leq 2.2$ ,  $1.8 \leq k5 \leq 2.2$ , and  $9.5 \leq k6 \leq 10.8$ ),  $\text{Y}_{m1}\text{Ba}_{m2}\text{Cu}_{m3}\text{O}_{m4}$  (where,  $0.5 \leq m1 \leq 1.2$ ,  $1.8 \leq m2 \leq 2.2$ ,  $2.5 \leq m3 \leq 3.5$ , and  $6.6 \leq m4 \leq 7.0$ ),  $\text{Nd}_{p1}\text{Ba}_{p2}\text{Cu}_{p3}\text{O}_{p4}$  (where,  $0.5 \leq p1 \leq 1.2$ ,  $1.8 \leq p2 \leq 2.2$ ,  $2.5 \leq p3 \leq 3.5$ , and  $6.6 \leq p4 \leq 7.0$ ),  $\text{Nd}_{q1}\text{Y}_{q2}\text{Ba}_{q3}\text{Cu}_{q4}\text{O}_{q5}$  (where,  $0 \leq q1 \leq 1.2$ ,  $0 \leq q2 \leq 1.2$ ,  $0.5 \leq q1 + q2 \leq 1.2$ ,  $1.8 \leq q2 \leq 2.2$ ,  $2.5 \leq q3 \leq 3.5$ , and  $6.6 \leq q4 \leq 7.0$ ),  $\text{Sm}_{p1}\text{Ba}_{p2}\text{Cu}_{p3}\text{O}_{p4}$  (where,  $0.5 \leq p1 \leq 1.2$ ,  $1.8 \leq p2 \leq 2.2$ ,  $2.5 \leq p3 \leq 3.5$ , and  $6.6 \leq p4 \leq 7.0$ ),  $\text{Ho}_{p1}\text{Ba}_{p2}\text{Cu}_{p3}\text{O}_{p4}$  (where,  $0.5 \leq p1 \leq 1.2$ ,  $1.8 \leq p2 \leq 2.2$ ,  $2.5 \leq p3 \leq 3.5$ , and  $6.6 \leq p4 \leq 7.0$ ).

Claims 2-9, and 11-12 are allowed for depending on claim 4.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2821

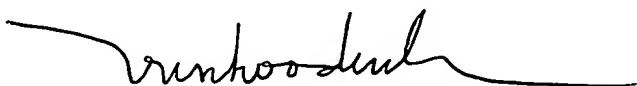
***Inquiries***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Mancuso whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Mancuso  
Patent Examiner

A handwritten signature in black ink, appearing to read 'Trinh Dinh', with a long horizontal flourish extending to the right.

TRINH DINH  
PRIMARY EXAMINER